Amendment to the Claims:

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claim 18 (currently amended): A method to produce a foodstuff [[containing]] comprising a [[microbial]] a polypeptide having a phytase activity comprising:

(a) providing a [[plant]] cell [[, plant part or plant that contains]] comprising an isolated or a recombinant [[expression vector comprising a]] phytase-encoding nucleic acid having a nucleotide sequence selected from the group consisting of

(i) a sequence as set forth in SEQ ID NO: 1, [[and]]

(ii) a sequence as set forth in SEQ ID NO: 1, wherein T can also be U; and

(iii) a nucleic acid encoding a polypeptide as set forth in SEQ ID NO:2 or a phytase having a sequence as set forth in SEQ ID NO:2 with conservative amino acid substitutions, wherein conservative amino acid substitutions comprise replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile, or, interchange of the hydroxyl residues Ser and Thr, or, exchange of the acidic residues Asp and Glu, or, substitution between the amide residues Asn and Gln, or, exchange of the basic residues Lys and Arg, or, replacements among the aromatic residues Phe, Tyr, or any combination thereof, or active fragments thereof;

(b) culturing the [[plant]] cell [[, plant part or plant]] under conditions wherein said nucleic acid is expressed as a polypeptide having a phytase activity; and

(c) converting said cell ~~plant cells, plant parts or plants~~ into a composition suitable for a foodstuff~~, wherein the foodstuff contains phytate and the phytase~~.

Claim 41 (currently amended): The method of claim [[18]] 85, wherein the ~~recombinant expression vector comprising the~~ nucleic acid encoding said phytase is within a host cell.

Claim 42 (currently amended): The method of claim 18 or claim 85, wherein said phytase-encoding nucleic acid is operably linked to a polynucleotide encoding a signal peptide.

Claim 43 (currently amended): The method of claim [[41]] 18 or claim 85, wherein the nucleic acid is operably linked to a transcription control sequence ~~operable in said plant cells, plant parts or plants~~.

Claim 44 (currently amended): The method of claim 43, wherein the control sequence comprises a tissue-specific promoter ~~that is specific for the plant cells, plant parts or plants~~.

Claim 45 (previously presented): The method of claim 43, wherein the control sequence comprises a constitutive promoter.

Claim 46 (currently amended): The method of claim 18 or claim 85, wherein the phytase is capable [[catalyzes liberation]] of hydrolyzing inorganic phosphate from [[the]] phytate [[in the foodstuff]].

Claim 47 (currently amended): The method of claim 46, wherein the [[liberation]] hydrolyzing occurs after the ingestion of said foodstuff by a recipient organism.

Claim 48 (currently amended): The method of claim 46, wherein the [[liberation]] hydrolyzing of the inorganic phosphate from [[the]] phytate [[in said foodstuff]] occurs in part prior to and in part after the ingestion of said foodstuff by a recipient organism.

Claim 49 (currently amended): The method of claim 46, wherein the [[liberation]] hydrolyzing of the inorganic phosphate from the phytate [[in said foodstuff]] occurs prior to the ingestion of said foodstuff by a recipient organism.

Claim 50 (currently amended): The method of claim 18 or claim 85, further comprising purifying the expressed polypeptide.

Claim 51 (currently amended): The method of claim [[18]] 80, wherein the plant comprises seeds containing the phytase ~~encoded by a nucleic acid having the nucleotide sequence as set forth in SEQ ID NO:1 to be used to catalyze phytate-hydrolyzing reactions~~.

Claim 52 (currently amended): The method of claim 18 or claim 85, wherein the foodstuff is for a non-ruminant animal.

Claim 53 (currently amended): The method of claim 18 or claim 85, wherein the foodstuff is for a monogastric animal.

Claim 54 (currently amended): The method of claim [[18]] 80, wherein the plant cell [[cells]], plant part, or plant is of a dicotyledonous species.

Claim 55 (currently amended): The method of claim [[18]] 80, wherein the plant cell [[cells]], plant part, or plant is of a monocotyledonous species.

Claim 56 (currently amended): A method to produce a foodstuff containing a [[microbial]] phytase comprising:

(a) providing a plant cell, plant part, seed or plant [[that contains]] comprising a ~~recombinant expression vector comprising a~~ phytase-encoding nucleic acid having a nucleotide sequence selected from the group consisting of

(i) a nucleic acid comprising a sequence encoding a polypeptide sequence as set forth in SEQ ID NO:2 and

(ii) a nucleic acid comprising a sequence encoding the polypeptide sequence as set forth in SEQ ID NO:2, wherein T can also be U;

(b) culturing the plant cell, plant part, seed or plant under conditions wherein said nucleic acid is expressed and a phytase is generated; and

(c) converting said plant [[cells]] cell, plant [[parts]] part, seed, or [[plants]] plant into a composition suitable for foodstuff~~, wherein the foodstuff contains phytate and the phytase~~.

Claim 57 (currently amended): The method of claim 56, wherein the nucleic acid further comprises a recombinant expression vector ~~comprising the nucleic acid encoding said phytase is within a host cell~~.

Claim 58 (previously presented): The method of claim 56, wherein said phytase-encoding nucleic acid is operably linked to a polynucleotide encoding a signal peptide.

Claim 59 (currently amended): The method of claim 57, wherein the nucleic acid is operably linked to a transcription control sequence operable in said plant [[cells]] cell, plant [[parts]] part, seed, or [[plants]] plant.

Claim 60 (currently amended): The method of claim 59, wherein the control sequence comprises a tissue-specific promoter that is specific for the [[cells]] cell, plant [[parts]] part, seed, or [[plants]] plant.

Claim 61 (previously presented): The method of claim 59, wherein the control sequence comprises a constitutive promoter.

Claim 62 (currently amended): The method of claim 56, wherein the phytase catalyzes [[liberation]] hydrolysis of inorganic phosphate from [[the]] phytate [[in the foodstuff]].

Claim 63 (currently amended): The method of claim 62, wherein the [[liberation]] hydrolysis occurs after the ingestion of said foodstuff by a recipient organism.

Claim 64 (currently amended): The method of claim 62, wherein the [[liberation]] hydrolysis of the inorganic phosphate from the phytate [[in said foodstuff]] occurs in part prior to and in part after the ingestion of said foodstuff by a recipient organism.

Claim 65 (currently amended): The method of claim 62, wherein the[[liberation]] hydrolysis of the inorganic phosphate from the phytate [[in said foodstuff]] occurs prior to the ingestion of said foodstuff by a recipient organism.

Claim 66 (previously presented): The method of claim 56, further comprising purifying the expressed polypeptide.

Claim 67 (currently amended): The method of claim 56, wherein the plant comprises seeds [[containing]] comprising the phytase ~~encoded by a nucleic acid having a sequence as set forth in SEQ ID NO:1 to be used to catalyze phytate-hydrolyzing reactions~~.

Claim 68 (previously presented): The method of claim 56, wherein the foodstuff is for a non-ruminant animal.

Claim 69 (previously presented): The method of claim 56, wherein the foodstuff is for a monogastric animal.

Claim 70 (currently amended): The method of claim 56, wherein the plant cell, plant part, seed, or plant is of a dicotyledonous species.

Claim 71 (currently amended): The method of claim 56, wherein the plant cell, plant part, seed, or plant is of a monocotyledonous species.

Claim 72 (currently amended): The method of claim 18, claim 85 or claim 86, wherein the foodstuff [[is]] comprises an animal feed.

Claim 73 (currently amended): The method of claim 56 [[46]], wherein the foodstuff [[is]] comprises an animal feed.

Claim 74 (currently amended): The method of claim [[52]] 18, claim 85 or claim 86, wherein the foodstuff [[is]] comprises an animal feed in a fluid form.

Claim 75 (currently amended): The method of claim [[53]] 18, claim 85 or claim 86, wherein the foodstuff is an animal feed in a solid form.

Claim 76 (currently amended): The method of claim [[56]] 18, claim 85 or claim 86, wherein the foodstuff [[is an animal feed]] comprises a fodder product.

Claim 77 (currently amended): The method of claim [[62]] 85 or claim 86, further comprising adding a hydroxylated vitamin D_3 derivative to [[wherein]] the foodstuff [[is an animal feed]].

Claim 78 (currently amended): The method of claim [[68]] 85 or claim 86, wherein the foodstuff [[is an animal feed]] comprises a phytin-containing grain.

Claim 79 (currently amended): The method of claim [[69]] 85 or claim 86, wherein the foodstuff [[is an animal feed]] comprises a rice grain.

Claim 80 (new): The method of claim 18, wherein the cell comprises a plant cell, a plant part, a seed, or a plant.

Claim 81 (new): The method of claim 80, wherein the cell comprises a eukaryotic cell or a prokaryotic cell.

Claim 82 (new): The method of claim 81, wherein the cell comprises a yeast cell, a mammalian cell or a bacterial cell.

Claim 83 (new): The method of claim 18, wherein the phytase-encoding nucleic acid comprises a vector.

Claim 84 (new): The method of claim 83, wherein the vector comprises an expression vector.

Claim 85 (new): A method to produce a foodstuff comprising a polypeptide having a phytase activity comprising:

(a) providing an isolated or a recombinant phytase-encoding nucleic acid having a nucleotide sequence selected from the group consisting of (i) a nucleic acid having a sequence as set forth in SEQ ID NO:1, (ii) a nucleic acid having a sequence as set forth in SEQ ID NO:1, wherein T can also be U; and (iii) a nucleic acid encoding a phytase having a sequence as set forth in SEQ ID NO:2, or encoding a phytase having a sequence as set forth in SEQ ID NO:2 with conservative amino acid substitutions, wherein conservative amino acid substitutions comprise replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile, or, interchange of the hydroxyl residues Ser and Thr, or, exchange of the acidic residues Asp and Glu, or, substitution between the amide residues Asn and Gln, or, exchange of the basic residues Lys and Arg, or, replacements among the aromatic residues Phe, Tyr, or any combination thereof, or active fragments thereof;

(b) expressing the nucleic acid to produce the polypeptide having a phytase activity; and

(c) adding the polypeptide to the foodstuff.

Claim 86 (new): A method to produce a foodstuff comprising a polypeptide having a phytase activity comprising:

(a) providing an isolated or a recombinant phytase having a sequence selected from the group consisting of (i) a phytase encoded by a nucleic acid comprising a sequence as set forth in SEQ ID NO:1, (ii) a phytase encoded by a nucleic acid comprising a sequence as set forth in SEQ ID NO:1, wherein T can also be U; (iii) a phytase having a sequence as set forth in

SEQ ID NO:2 or a phytase having a sequence as set forth in SEQ ID NO:2 with conservative amino acid substitutions, wherein conservative amino acid substitutions comprise replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile, or, interchange of the hydroxyl residues Ser and Thr, or, exchange of the acidic residues Asp and Glu, or, substitution between the amide residues Asn and Gln, or, exchange of the basic residues Lys and Arg, or, replacements among the aromatic residues Phe, Tyr, or any combination thereof, or active fragments thereof; and

(b) adding the polypeptide to the foodstuff.

Claim 87 (new): The method of claim 18, claim 85 or claim 86, wherein the phytase activity comprises a phytate-hydrolyzing reaction.

Claim 88 (new): A foodstuff comprising a polypeptide having a phytase activity made by a method comprising:

(a) providing an isolated or a recombinant phytase having a sequence selected from the group consisting of (i) a phytase encoded by a nucleic acid comprising a sequence as set forth in SEQ ID NO:1, (ii) a phytase encoded by a nucleic acid comprising a sequence as set forth in SEQ ID NO:1, wherein T can also be U; (iii) a phytase having a sequence as set forth in SEQ ID NO:2 or a phytase having a sequence as set forth in SEQ ID NO:2 with conservative amino acid substitutions, wherein conservative amino acid substitutions comprise replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile, or, interchange of the hydroxyl residues Ser and Thr, or, exchange of the acidic residues Asp and Glu, or, substitution between the amide residues Asn and Gln, or, exchange of the basic residues Lys and Arg, or, replacements among the aromatic residues Phe, Tyr, or any combination thereof, or active fragments thereof; and

(b) adding the polypeptide to the foodstuff.

Claim 89 (new): A foodstuff comprising a polypeptide having a phytase activity made by a method comprising:

(a) providing an isolated or a recombinant phytase-encoding nucleic acid having a nucleotide sequence selected from the group consisting of (i) a nucleic acid having a sequence as set forth in SEQ ID NO:1, (ii) a nucleic acid having a sequence as set forth in SEQ ID NO:1, wherein T can also be U; and (iii) a nucleic acid encoding a phytase having a sequence as set forth in SEQ ID NO:2, or encoding a phytase having a sequence as set forth in SEQ ID NO:2 with conservative amino acid substitutions, wherein conservative amino acid substitutions comprise replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile, or, interchange of the hydroxyl residues Ser and Thr, or, exchange of the acidic residues Asp and Glu, or, substitution between the amide residues Asn and Gln, or, exchange of the basic residues Lys and Arg, or, replacements among the aromatic residues Phe, Tyr, or any combination thereof, or active fragments thereof;

(b) expressing the nucleic acid to produce the polypeptide having a phytase activity; and

(c) adding the polypeptide to the foodstuff.

Claim 90 (new): A foodstuff comprising a polypeptide having a phytase activity made by a method comprising:

(a) providing a cell comprising an isolated or a recombinant phytase-encoding nucleic acid having a nucleotide sequence selected from the group consisting of

(i) a sequence as set forth in SEQ ID NO: 1,

(ii) a sequence as set forth in SEQ ID NO: 1, wherein T can also be U; and

(iii) a nucleic acid encoding a polypeptide as set forth in SEQ ID NO:2 or a phytase having a sequence as set forth in SEQ ID NO:2 with conservative amino acid substitutions, wherein conservative amino acid substitutions comprise replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile, or, interchange of the hydroxyl residues Ser and Thr, or, exchange of the acidic residues Asp and Glu, or, substitution between the amide residues Asn and Gln, or, exchange of the basic residues Lys and Arg, or, replacements among the aromatic residues Phe, Tyr, or any combination thereof, or active fragments thereof;

(b) culturing the cell under conditions wherein said nucleic acid is expressed as a polypeptide having a phytase activity; and

(c) converting said cell into a composition suitable for a foodstuff.

Claim 91 (new): The foodstuff of claim 88, claim 89 or claim 90, wherein the foodstuff comprises an animal feed.

Claim 92 (new): The foodstuff of claim 91, wherein the foodstuff comprises an animal feed in a fluid form.

Claim 93 (new): The foodstuff of claim 88, claim 89 or claim 90, wherein the foodstuff comprises a fluid form.

Claim 94 (new): The foodstuff of claim 93, wherein the fluid form foodstuff comprises a milk, a sake, a liquor, a wine, a beer, a juice, an extract, a homogenate or a puree.

Claim 95 (new): The foodstuff of claim 91, wherein the foodstuff is an animal feed in a solid form.

Claim 96 (new): The foodstuff of claim 88, claim 89 or claim 90, wherein the foodstuff comprises a fodder product.

Claim 97 (new): The foodstuff of claim 88, claim 89 or claim 90, further comprising adding a hydroxylated vitamin D_3 derivative to the foodstuff.

Claim 98 (new): The foodstuff of claim 88, claim 89 or claim 90, wherein the foodstuff comprises a phytin-containing grain.

Claim 99 (new): The foodstuff of claim 88, claim 89 or claim 90, wherein the foodstuff comprises a rice grain.

Claim 100 (new): The foodstuff of claim 88, claim 89 or claim 90, wherein the foodstuff comprises a soybean, a corn or a sorghum.

Claim 101 (new): The foodstuff of claim 100, wherein the foodstuff comprises a soybean milk.